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Abstract

Proper management of working capital is essential to organization financial and operational growth. The success of corporate governance is the ability to utilize working capital in order to maintain a solid balance between growth, profitability and liquidity. Lack of effective management of working capital affects a business since a business that does not manage its liquidity was suffer cash shortages and as a result

experience problems paying its obligations when they fall due. This study determined the effect of board tenure expertise and board size on working capital management of agricultural firms listed in the Nairobi Securities Exchange (NSE). The study was conducted through explanatory survey research design. The target population of this study was board members and accounting staff from 6 agricultural firms listed in the NSE. The data collection instrument was self-administered questionnaire. The data was analyzed using descriptive statistic and inferential statistics. The data was analyzed with the help of SPSS version 22. Both content validity and construct validity was adopted in this study. Internal consistency reliability was measured using cronbach alpha coefficient. The results of the study established that financial expertise of the board positively and significantly affects working capital management (β ; 0.163; $p < 0.05$). The findings of the study are of significance to policy makers for decision making on working capital management, and board composition. More so, the study will provide a useful insight on the role the policy makers' decision on board tenure. The academia can use the findings of this for future reference. This study contributes to the literature on the factors that improve the efficiency of working capital management, and in particular on the relationship between board composition and working capital management.

INTRODUCTION

Agriculture is the backbone of the Kenyan economy. The firms which play in this sector need to efficiently manage the working capital in order to be competitive in the dynamic business environment. Working capital management involves the relationship between the firm's short term assets and its short term liabilities. The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short

term debts and upcoming operational expenses (Gill, Biger & Mathur, 2010).

The management of working capital involves managing inventories, accounts receivable, accounts payable and cash. Working capital is a measure of both company's efficiency and its short term financial health. Working capital is the difference between current assets and current liabilities. Efficient management of Working Capital (WC) is essential for firms during the booming economic period and can be managed to improve competitive position and profitability,

also improving WC is important for companies to withstand the impacts of economic turbulence (Enqvist, Graham & Nikkinen, 2014).

Poor working capital and inadequate long term financing is a cause of failure in business firms. The current assets should be large enough to cover its current liabilities in order to ensure a good margin of safety (Gul, Khan, Raheman, Khan, Khan & Khan, 2013). Each of the current assets must be managed efficiently in order to maintain the liquidity of the firm while not keeping them at a high level. Liquidity measures the ability of the firm to meet financial obligations as they fall due, without disrupting the owner equity, using the market value of assets. Liquidity is measured using the current ratio which is the ratio of current assets to the current liabilities (Saleem & Rehman, 2011). The board of directors of the organizations play a key role with regard overseeing and monitoring the management in order to align the interest of the management with the ones of the shareholders. Therefore, the composition of the board is very important in establishing the role boards play in the organizations.

Separation of ownership and management resulted into conflict of interest that is managers serving as shareholders' agents engage in behaviour that provides them with personal benefits at the expense of shareholders and then take actions that do not maximize the welfare of the principal (Jensen and Meckling 1976). These potential conflicts led to the development of corporate governance control mechanisms and disciplinary measures to sub-optimal managerial behaviour, improve corporate governance and then firm performance (Jensen and Meckling 1976). The board therefore is the internal governance mechanism that aligns the shareholders' interests with those of the management (Depret *et al.*, 2005; Norwahida *et al.*, 2012).

Ahmed, Awan, Safdar, Hasnain and Kamran (2016) signify that working capital management and profitability of the company disclosed both negative and positive association in India. However, Makori and Jagongo (2013) demonstrate a strong negative relationship exists between variables of the working capital management represented by liquidity and debt with profitability of the firm in Pakistani firms

listed on Karachi Stock Exchange. Gill and Bigger (2013) examined the association between corporate governance and cash policy of family-controlled firms. The authors found that the impact of corporate governance, with its separation of control rights and cash flow rights, director-ownership-in-pledge ratio and proportion of independent directors on cash policy, differs between family-controlled and nonfamily-controlled firms. The authors also found that the separation of seat control rights and cash flow rights, as well as chair duality, significantly affects the cash policy within different levels of cash holdings in firms (Gill *et al.*, 2013).

From Turkey Huang, Marquardt and Zhang (2014) found that risk-aversion of managers helps explain a firm's choice between debt and equity. A significant extent of the variation in investment, financial and organizational practices of firms can be explained by the presence of manager fixed effects. However he also indicated that most studies have given much attention to the developed countries, such as United States, leaving a gap in the existing literature on the determinant of capital structure in emerging economies such as Kenya.

Regionally, the issue of working capital management of listed agricultural firms is also of major concern since many organizations struggle with the same and have even gone under as a result (Amin, 2014). Kumaraswamy (2016) indicated that efficient strategic financial management practices such as capital structure, investment practices as major predictor of firm profitability and overall financial performance. They also argue that efficient strategic financial management practices enable firms to be profitable in Ghana. Muhammad, Rehman and Waqas (2016) noted a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working capital management between large and small firms.

According to Panigrahi (2013) small manufacturing firms in Mauritius the high investment in inventories and receivables is associated with lower profitability. The findings

reveal an increasing trend in the short-term component of working capital financing. Agyei and Mbawuni, Mbawuni and Nimako (2016) looked into working capital management and profitability of selected banks in Ghana. It was found that CCC had a positive relationship with banks' profitability.

In Kenya, the issue of working capital management in listed agricultural firms has also posed significant challenges in various industries leading to poor performance and even closure of some of these companies (Bates, 2014). Mitau, (2013) in a study conducted among non-financial firms listed in the NSE found that these institutions follow conservative working capital management policy and the firms need to concentrate and improve their collection and payment policies. The study asserts that effective policies must be formulated for individual components of working capital so as to obtain optimal levels for each. Efficient financing and managing of working capital can thus increase the operating profitability on non-financial institutions in Kenya. Karani, (2013) in his study conducted among manufacturing firms listed in the NSE showed that the adoption of corporate governance practices plays an important role in improving the efficiency of working capital management. The agricultural sector is also one of the industries which have suffered the blunt for poor working capital management. This has resulted in companies operating in these sector having constant wrangles with farmers over delayed payments, poor pricing of products which have seen farmers bear the blunt of production without good returns and many companies in the agriculture sector closing down (Galt, 2013).

The dairy industry is one such area where poor working capital management has seen over 50 per cent of dairy companies in the country closed down in the period between 2003 and the year 2010 (Gomez and Ricketts, 2013). Further, the remaining companies which were still in operations were observed to be operating at below capacity (Bingi & Tondel, 2015). The challenge is not limited to the dairy industry but also to entire agricultural industry which this study aims to examine specifically looking at

The size of the organization also determines the cash flow sensibility to investments (Kubai, 2016). In measuring the size of the firm, total

number of employees of the firm, volume of sales and amount of property are the main factors that are usually measured (Maroa and Kioko, 2016). Large organization's size determines the level of economics of scale enjoyed by the firm. When a firm becomes larger it enjoys economics of scale and the average production cost is lower and operational activities are more efficient. Hence, larger firms generate larger returns on assets. However, larger firms can be less efficient if the top management lose their control over strategic and operational activities within the firm (Chandrapala & Knápková, 2013). Large firms are also more diversified than small ones and have greater market power and during good times may have relatively more organizational slack. This study aims to determine the moderating effect of organizational size on the relationship between board composition and working capital management in listed agricultural firms in NSE

Statement of the Problem

Weak financial management that is poor working capital management and inadequate long term financing is a cause of failure among agricultural businesses listed in NSE in Kenya. It is difficult for a firm to perform well if its average collection period is long, if its inventory conversion period is long, has a poor cash conversion cycle and has a long coverage payment period because all these relate to the day to day running of the business which is a main determinant of the high performance of the firm. The agricultural sector in Kenya has been faced by numerous challenges with companies operating in these sector having constant wrangles with farmers over delayed payments, poor pricing of products which have seen farmers bear the blunt of production without good returns, business cartels which serve as middlemen and take advantage of small scale farmers. Despite the support from the government, Kenya has continued to face enormous challenges in the agriculture sector with many companies in the agriculture sector closing down (Mwamuye, Nyamu, Mrope and Ndamungu, 2012). The government has however continued supporting the agricultural organizations with efforts geared towards establishing the factors leading to the poor financial performance and collapse of the companies. Odalo, Achoki and Njuguna (2017) observed that over 50 per cent of dairy companies

in the country had closed down in the period between 2003 and the year 2010 while almost all the remaining dairy based companies were operating at below capacity. Similarly, Odalo et al (2017) reported a similar trend with the crop based companies closing down or operating below capacity.

Mitau (2013); Finau (2012); Kaleem (2016); Akanni (2016); Macharia, (2012) among others have carried some research on working capital management and performance of firms in relation to profitability putting spot light on managers of organizations, however no record of any research is traced on board members composition charged with maintaining good corporate governance and the working capital managing and the moderating effect of organizational size. This research specifically intends to establish whether the composition of the board members has any effect on the working capital management when the size of the company is a moderator.

Objectives of the Study

The study was guided by both general and specific objectives

General Objective

The objective of the study was to determine the effect of financial expertise of the board on working capital management in listed agricultural firms in NSE

Research Hypothesis

H₀₁ There is no significant effect between board financial expertise and working capital management in listed agricultural firms in NSE

LITERATURE REVIEW

Theoretical Framework

This section was review the agency theory, upper echelons theory and resource dependence theory.

Resource Dependence Theory

Resource dependence theory provides a theoretical foundation for the role of board of directors as a resource to the firm (Johnson et al., 1996; Hillman et al., 2000). Penrose (1959) stressed the importance of unique bundles of resources a firm control that are crucial for its growth. Such resources include all assets,

capabilities, organizational processes, firm attributes, information, and knowledge controlled by a firm, in order to improve efficiency and effectiveness (Barney, 1991; Daft, 2006). From this point of view, firm governance structure and the board composition is viewed as a resource that can add value to the firm.

A key argument of the resource dependence theory is that organizations attempt to exert control over their environment by co-opting the resources needed to survive (Pfeffer & Salancik, 1978). Accordingly, boards are considered as a link between the firm and the essential resources that a firm needs from the external environment for superior performance. Appointment of outsiders on the board helps in gaining access to resources critical to firm success (Johnson *et al.*, 1996). In the resource dependence role, outside directors “bring resources to the firm, such as information, skills, access to key constituents (among others, suppliers, buyers, public policy decision makers, social groups) and legitimacy” (Hillman *et al.*, 2000).

Board directors also function as boundary spanners, and there by enhance the prospects of a firm’s business. For example, the outside links and networks that board members exercise may positively benefit the development of business and long-term prospects. Pfeffer and Salancik (1978) observe, when an organization appoints an individual to a board, it expects the individual was come to support the organization, was concern himself [or herself] with its problems, was favorably present it to others, and was try to aid it”. Appointment of outside directors and board interlocks can be used to manage environment contingency. In an earlier study, Pfeffer (1972) showed that the board size and background of outside directors are important to managing an organization’s needs for capital and the regulatory environment.

Resource dependency role of board of directors also examines how they help the firm in gaining access to financial resources (Thompson & McEwen, 1958; Pfeffer, 1972; Mizruchi & Stearns, 1988). Thompson and McEwen (1958) argued that a firm with a higher level of bank debt might appoint an officer of the bank to ensure easy access to the bank’s funds. Similarly,

Mizruchi and Stearns (1988) find that firms with solvency problems are likely to appoint representatives of the financial institutions to their boards. Such appointments show that the value placed on capital as a resource plays a role in the behavior of individual firms. Stearns and Mizruchi (1993) also find an association between firms borrowing strategy and type of financial representation on the board as such relationships provide both the parties with an opportunity to co-opt each other on a continuous standing.

Empirical Review

Board Financial Expertise and Working Capital Management

According to He, & Xiong, (2013) financial expertise is a person who understands the generally accepted accounting principles (GAAP) and financial statements; is experienced in preparing or auditing financial statements of comparable companies; have experience accounting for estimates, accruals, and reserves; understand internal accounting controls; and understand the functions of an audit committee. Letting, Nicholas, Kaosa and Machuki (2012) carried out a study on board diversity and performance of companies listed in Nairobi Stock Exchange. This study examined the relationship between Board diversity and financial performance of firms listed in the Nairobi Stock Exchange. Data on Boards' age, gender, educational qualifications, study specialization, and board specialization as well as the companies' financial performance were obtained from 40 companies using a structured questionnaire. Using the Ordinary Least Squares (OLS) regression, the results show that there is a weak positive association between board diversity and financial performance. Overall, the results indicate a statistically not significant effect of board diversity on financial performance except for the independent effect of board study specialization on dividend yield. The results partially concur with agency and resource dependency theories of corporate governance as well as similar empirical studies. Ensuing implications for theory, policy and practice as well as methodology are also discussed.

According to He, & Xiong, (2013) financial expertise is a person who understands the

generally accepted accounting principles (GAAP) and financial statements; is experienced in preparing or auditing financial statements of comparable companies; have experience accounting for estimates, accruals, and reserves; understand internal accounting controls; and understand the functions of an audit committee. Financial expertise of a team may increase the probability of cross-cultural communication problem (Lehman and Dufrene, 2013) and interpersonal conflicts (Cos, Jr., 2009). However, it may also bring competitive advantages to the firm such as international networks, commitment to shareholder rights and managerial entrenchment avoidance (Oxelheim and Randoy, 2003). Financial expertise is also not studied a lot. In the Netherlands live a lot of people with different financial expertise and the amount of people with different nationalities are growing. Therefore, it is important to investigate the effect of nationality diversity on boards, because in the future more and more people from different nationalities may be candidates for board positions (Erhardt *et al.*, 2003). There is no negative effect of nationality diversity on company performance found.

Minton, Taillard and Wasiamson (2010) examined the performance and risk taking behavior of a broad sample of US financial institutions both during and prior to the financial crisis and relate them to the financial expertise levels of their independent board directors. They find that prior to the crisis outside financial experts on the board were associated with higher risk taking and slightly above average performance. Their results are consistent with the idea that banks with more financial expertise among independent directors perform worse during the crisis, particularly for large commercial banks. Also they investigate that banks with more financial experts have more leverage.

Kroszner and Strahan (2001) investigated what determines the presence of a commercial banker on the board of a non-financial firm. According to their paper bankers tend to be on the boards of large stable firms with high tangible capital ratios and low reliance of short term debt financing. Previous studies found positive effects or no effect at all of financial expertise on company performance. Erhardt *et al.* (2003) found a

positive effect of financial expertise on company performance in the US, Dang et al. (2013) found positive effect of Financial expertise in the US and Richard (2000) also found a positive effect of financial expertise on company performance. There are also studies which did not find any effect of financial expertise on company performance, such as: Engelen et al. (2012) in the Netherlands and Rondoy et al. (2012) in Scandinavian countries.

A study by Guner, Malmendier and Tate (2006) focuses on the effect of the financial expertise of directors in South Africa. They examine whether financial experts on the board influence corporate decisions. They analyze a sample of 282 publicly traded companies from 1988 to 2001 and make a conclusion that financial experts significantly affect corporate decisions, but only when their influence serves the interest of their own institutions. The study was conducted in three steps: firstly looking at the internal investment and loan financing, secondly looking at the external financing and financing with public securities and thirdly looking at the financial

expertise and CEO compensations. The outcome from the obtained research questions are that a firm displays less investment cash flow sensitivity and obtains larger loans when commercial bankers are on the board of the particular firm. Additionally firms with financial experts on their boards undertake worse acquisitions and are associated with larger bond issues. Finally from the third research question authors show that overall the financial expertise doesn't influence much the compensation policy. However, there is need to look at the Kenyan situation with its different economic and company developmental connotations.

Conceptual Framework

The study was employ the following conceptual framework to illustrate how the variables interact in the study on the moderating role of organizational size on the relationship between board composition and working capital management in listed agricultural firms in the NSE. This is illustrated in figure 2.1

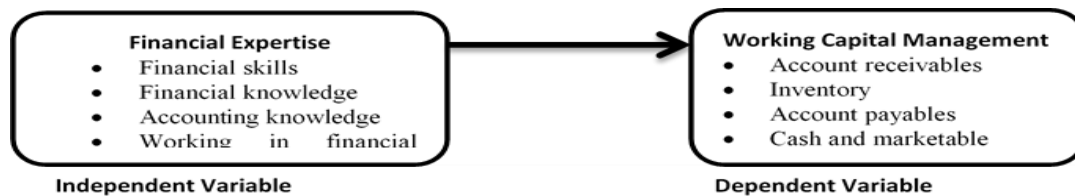


Figure 2.1: Conceptual Framework.

Source: (Authors, 2019)

The independent variable of the study was financial expertise of the board. The dependent variable of this study was be working capital management indicated by account receivables, inventory, account payables and cash and marketable securities.

RESEARCH METHODOLOGY

Research Design

The study employed explanatory survey research design as it is concerned with the causal explanation of events. Mackey and Gass (2015) recognize the need of informative outline especially when the purpose is to accomplish a

more far reaching thought of the setting of the exploration and techniques being looked for.

Target Population

According to Moser and Kalton (2017) a population is a defined set of people, services elements events and group of things or households that are being investigated. The target population was 49 board of directors, and 12 accounting officers' total respondents were 61 from six agricultural firms listed in the NSE in the year 2018. These are; Eaagads Limited, Kakuzi Limited, Kapchorua Tea Company Limited,

Limuru Tea Company Limited, Sasini Tea and Coffee and Williamson Tea Kenya Limited (NSE, handbook, 2018).

Data Collection Instruments

Crestwell (2003) defines data collection as a means by which information is obtained from selected subject of investigation. Primary data were collected from board members and finance officers/accountants using self-administered semi-structured questionnaires (Benchhofer & Paterson, 2008). This technique involves interviewer meeting the respondents physically and asking questions face to face as either the respondents or the interviewer fills in the questionnaire.

Self-administered questionnaire was the main research instrument of collecting primary data (Ericksson & Kovalainen, 2008). Self-administered questionnaire has a higher response rate (Benchhofer & Paterson, 2008). A five likert scale questionnaire was used. Burns et al., (2008) posits that a likert scale is a psychometric scale commonly involved in research that employs questionnaires. It is the most widely used approach to scaling responses in survey research. Questionnaires were used because of their low cost even when the universe is large, results can be more dependable and reliable and is free from bias of the interviewer (Kothari, 2004).

Data Collection Procedure

After testing the validity and reliability of the research questionnaires and making all relevant reviews during pilot study, the researcher will sought the consent of University of Eldoret. Data was then be collected using self-administered questionnaires to collect primary data and data collection schedules to collect secondary data on the sampled respondents in person or research assistants.

Pre-testing of Research Instruments

Pilot study refers to a small –scale rehearsal of the larger research design. It enables testing of the feasibility, equipment and methods (Sreevidya & Sunitha, 2011). Kothari (2004) notes that a pilot study is often used to pre-test or try out a research instrument and that a sample of 10%- 20% of the sample size for the actual study is a reasonable number of participants to consider enrolling to a pilot.

A pilot test was done before embarking on actual data collection activity (Eriksson and Kovalainen, 2008). The proportionate sample of 4 randomly drawn sugar industries in western Kenya. Therefore 8 questionnaires were administered in pilot testing to test the degree of accuracy of the instrument used to collect data in locations in which the pilot survey took place. The purpose of a pilot test is to enable validity and reliability of research instruments to be determined (Cooper & Schindler, 2011).

Validity

According to Mugenda (2008) and Saunders et al., (2011) a test is deemed valid if it actually measures what was intended. Validity is the accuracy, truthfulness and meaningfulness of inferences that are based on the data obtained from a tool or scale for each construct in the study (Mugenda, 2008). Content validity technique measures the degree to which the questions items reflects the specific research areas covered (Mugenda, 2008). The study used content validity to test the accuracy of data collection instruments. A judgment procedure of assessing whether a tool is likely to provide contents valid data is to request opinion of experts in a particular field to review it and give suggestions on content improvements (Mugenda, 2008). Opinion of research supervisor was sought to review data collection instruments.

Reliability Results

Mugenda (2008) observed that reliability is a measure of degree to which a research will yield consistent results after repeated trials. Reliability is if the analyst measures the same variables several times and the results are approximately the same (Rabianski, 2003). Reliability test was conducted as a test of whether data collecting instrument yielded the same result on repeated trials. A statistical coefficient Cronbach's Alpha (α) was used as a measure of internal reliability (Cronbach, 1971) with the aid of Statistical Package for Social Sciences (SPSS) software.

Data Processing and Analysis

The quantitative data was gathered from the annual reports of the listed firms in Nairobi securities exchange. The data collected were analyzed using descriptive and inferential statistics. Descriptive statistics employed frequencies and percentages while inferential statistics were done through multivariate

regression. The research employed a panel type of study. It was employed in this study because it has a particular design of explanatory survey research design in which the unit of analysis is followed at specified intervals over a long period, often many years and since the study looked at data from.

Model Specification

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \dots \dots \dots \text{Equation 3.2}$$

Where;

Y_t = Working capital management of firms

β_0 = constant

X_1 = gender diversity of board of directors of firm

β_1 = coefficients of financial expertise of the board.

ε represents error term

FINDINGS, PRESENTATIONS AND DISCUSSIONS

Response Rate

Response rate equals the number of people with whom the semi-structured questionnaires were properly completed by the total number of people in the entire sample (Fowler, 2004). From each of 6 firms, two types of questionnaires were issued thus 62 semi-structured questionnaires were administered for data collection. However, 53 questionnaires were properly filled and returned from for analysis. This represents 85 percent overall successful response rate. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. This implies that 85 % response rate was very appropriate for data analysis. The results of response rate are presented in Table 4.1

Table 4.1: Response Rate

Response Rate	Frequency	Percent
Returned	53	85%
Unreturned	9	15%
Total	62	100.0

Reliability Test Results

This study assessed the internal consistency of the research questionnaire. The results of analysis are shown in Table 4.2

Table 4.2 Reliability of the Research Questionnaires

Constructs	Cronbach's Alpha	Test Items
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Board Financial Expertise	0.983	4
Working Capital Management	0.982	4

The results indicated that all variables had Cronbach's Alpha coefficients greater than 0.7. This implies that the research questionnaire was reliable as all the five constructs had a Cronbach's alpha coefficient greater than 0.7.

Demographic Information

This section consists of information that describes basic characteristics; gender, age, level of education. Each respondent's demographic characteristics were important for the study since it helped to understand the background of the respondents before embarking on obtaining the responses which were aimed to achieve the specific objectives.

Gender of the Respondents

The respondents were asked to indicate their gender. Results were presented in Table 4.3

Table 4.3: Genders of the Respondents

Gender	Frequency	Percent
Male	44	82.0
Female	9	18.0
Total	53	100.0

Table 4.3 illustrates that majority (81%) of the respondents were male and 39% were female. This implies that agricultural listed firms' board of directors is dominated by the male. However, these results showed that at least each gender was presented in providing the findings of these research.

Age of the Respondents

The study sought to establish if the age of the respondents involved in the management of the firms are dominated by a particular age bracket. Table 4.4 shows the distribution of respondents' age.

Table 4.4: Age of the Respondents

Age bracket	Frequency	Percent
Below 20 years	1	1.80
20-40 years	18	34.00
40-60 years	23	43.40
Over 60 years	11	20.80

Total 53 100.0

From the findings of the study majority 23 (43.4%) of the respondents were in the age bracket of 40 and 60 years. Few 18 (34.00 %) of the respondents were in the age category of 20-40 years. A small proportion of respondents 11 (20.80%) were in age bracket above 60 years. And 1 (1.80%) of the respondents were aged below 20 years. This implies that the respondents were of an adult age and are in a position to make reasonable judgment when answering the questionnaires.

Level of Education of the Respondents

The respondents were asked to indicate their highest level of education. This was to ascertain if the respondents were knowledgeable and the level of academic education they possess as represented in table 4.5.

Table 4.5: Level of Education of the Respondents

Level of Education	Frequency	Percent
Diploma/ Certificate	7	13.20
Bachelors' Degree	26	49.05
Masters' Degree	11	20.75
Others	9	17.00
Total	53	100.0

The findings in the Table 4.5 illustrates that 13.20% of the respondents had reached college level, while majority of the respondents 49% had done a bachelors level, 11% had reached masters

Table 4.6: Descriptive Statistics for Financial Expertise

	N	Min	Max	Mean	Std Dev
(i) financial skills possessed by the board members is a necessary requirement	53	1	5	3.89	1.437
(ii) the board has the necessary financial knowledge required	53	1	5	4.09	1.167
(iii) Accounting knowledge and skills puts one in a position to understand financial records	53	1	5	3.39	1.459
(iv) Working in financial institution can give a person the experience in finance	53	1	5	3.34	1.357

It was established that the respondents agreed (mean=3.89; std dev=1.437) that financial expertise can be enhanced by having some financial skill. It was agreed (mean=4.09; std dev=1.167) that the board has the necessary

level and 9% had other level of education which was accountancy qualifications. The findings imply that most of the respondents had a minimum level of education which could have contributed to accurate responses.

Descriptive Statistics of Study Variables

The study examined the views of respondents on Board composition and working capital management of listed agriculture firms in NSE Kenya. The study further sought their views on the moderating effect of firm size on the relationship between Board composition and working capital management of listed agriculture firms. The respondents were required to indicate their level of agreement/disagreement with various statements on a five-point likert scale from 1-5 representing not at all to very great extent. The responses expected were: Not at all (NA), little extent (LE), moderate (M), great extent (GE) and very great extent (VE). The frequencies (Freq) and percentages (perc) for each responses were recorded.

Descriptive Statistics for Financial Expertise

The second objective was to establish the effect of financial expertise on working capital management of agricultural listed firms in NSE, Kenya. The study focused particularly on the following indicators financial skills, financial knowledge, accounting knowledge and skills, and working in financial institutions.

The study put into perspective the opinions of respondents regarding financial expertise. The relevant results are presented in Table 4.6.

financial knowledge which is required. In addition, the respondents were in agreement (mean=3.97; std dev=1.486) that accounting knowledge and skills is a necessity in understanding accounting books. However, it was

also unclear (mean=3.34; std dev=1.357) whether working in financial institutions can enhance one's financial expertise.

Descriptive Statistics on Working capital Management

The study finally sought to determine the indicators of working capital management of agricultural firms in NSE. The study results were as tabulated in Table 4.7.

Table 4.7: Working capital Management

Statements	N	Min	Max	Mean	Std. Dev
i. High Accounts receivables indicate well managed working capital	53	1	5	4.30	0.848
ii. Increase in inventory is indicates inefficient in management of working capital	53	1	5	4.20	0.85
iii. Accounts receivables when high is a good measure of well managed working capital	53	1	5	4.21	0.820
iv. Cash and marketable securities are good measures of well managed working capital	53	1	5	4.47	0.816

The study results on indicators of working capital agreed (mean=4.30; Std. Dev 0.844) that account receivables indicate well management of working capital among agricultural firms. In addition, the respondents agreed. It was also supported by (Mean=4.20; Std. Dev 0.085) that when inventory increases it is a sign of inefficiency in working capital management of agricultural firms. Further findings showed that there was an agreement (mean=4.21; Std. Dev 0.820) that account receivables when high indicates well management of working capital. Lastly the respondents agreed (mean=4.46; Std. Dev 0.816) that cash and marketable securities are good measures of working capital management.

Inferential Analysis

This section presents the results of correlation and multiple regression analysis in line with the specific objectives of this study.

Overall Correlation Analysis

Pearson's product-moment correlation coefficient (r) was used to measure the extent of correlation between variables of the study and to show the strength of the linear relationship between variables in the regression ranges between +1 and -1. The results of correlation analysis are presented in Table 4.8 below.

Table 4.8: Correlation Coefficient Matrix

		Working Capital Management	Financial Expertise
Working Capital Management	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Financial Expertise	Sig. (2-tailed)	.000	
	Pearson Correlation	.329*	1.000
	Sig. (2-tailed)	.000	
	Sig. (2-tailed)	.000	.013

***. Correlation is significant at the 0.01 level (2- tailed).* **. Correlation is significant at the 0.05 level (2- tailed).*

Correlation results showed that there was positive and significant relationship between board's financial expertise size and working capital management ($r=0.329$, $p<0.05$). This result implied that with financial expertise of the board enhances efficiency in working capital management is also enhanced.

Multiple Regression Analysis.

The research used multiple linear regression analysis to determine the linear statistical relationship between the independent variables (financial expertise) and dependent variable (working capital management).

Table 4.9: Multiple Regression Model Summary for Board Composition

R	R. Squared	Adjusted R Squared	Std. Error of the Estimate
.672 ^a	.452	.438	.02792

Dependent Variable: Working Capital

Assessing the Fit of Multiple Regression Model

The study examined whether the multiple regression model was a good fit for the data. Analysis of Variance (ANOVA) was conducted in

order to find out if working capital management can be predicted without relying on board composition variables examined in the study. The results of Analysis of Variance (ANOVA) are shown in Table 4.10.

Table 4.10: Results of ANOVA

	Sum of Squares	df	Mean Square	F	Sig
Regression	18.533	4	4.633	12.727	.000a
Residual	70.262	193	.364		
Total	88.794	197			

a. Predictor: (Constant), financial expertise of the board

b. Dependent Variable: working capital management

The findings of the study indicate that the relationship between the independent variables and the dependent variable was statistically significant ($F=12.727$; $p<0.05$). This implies that the multiple regression model was good fit for the

data. Hence financial expertise of the board influence working capital management of listed agricultural firms in Kenya.

Regression Coefficients

The study also conducted t-test of statistical significance of each individual regression coefficient. Table 4.11 presents the results.

Table 4.11: Significant Test Results for Overall Model

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.957	.311		3.071	.002
Financial Expertise	.163	.073	.147	2.259	.040

a. Dependent Variable: Working Capital Management

Hypothesis Testing

The null hypothesis H_{01} postulated that board financial expertise has no significant effect on working capital management. The results as shown in the table 4.18 indicates that board's financial expertise has a positive and significant effect on working capital management ($\beta=163$; $p < 0.05$). Thus, the null hypothesis was rejected at significance level of 5%. Implying that financial expertise of the board enhances firms' working capital management. This could be as a result of the skills and knowledge of finance which the board members can use to oversight the management efficiently. These findings are in agreement with the finding of Erhardt et al. (2003) found a positive effect of financial expertise on company performance in the US.

From the t-test results of individual regression coefficients, the four independent variables were included in the regression equation as they were significant ($p < 0.05$). The study results is shown in regression equation 4.1

$$Y = 0.957 + 0.163X_1 \dots \dots \dots \text{Equation 4.1}$$

The findings from the multiple regressions analysis are in agreement with the preposition of the theories that this study was anchored on. The theory of resource dependency advocates that the board of management should be of member with diverse skills and knowledge to be able to discharge the mandate over the management on behalf of the shareholders.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Findings

This section presents the summary of the study objectives.

Financial Expertise of the Board

The second objective of the study was aimed at establish the effect of board financial expertise of the board on working capital management in listed agricultural firms in NSE. The study found that firms with financial experts in the boards' tend to have efficient working capital management.

Conclusions

The study concluded that if a board member serves for a longtime in a firm, tends to become management friendly and hence lose independence on the management. As a result the firm's working capital is not efficiently managed. Therefore, board members should not stay in the firm for a long period.

From the study it was also concluded that financial expertise of the board members matters in a positive manner in enhancing working capital management. Thus, firms should employ board members who have financial expertise and skills.

Recommendations

The study recommends that governance policies need to be set the term limits for which board members serves in the board of an organization since longer tenure breeds management

friendliness and therefore leads to allegiance problems.

The study recommends that the board members should have experience in finance and accounting for estimates, accruals, and reserves; understand internal accounting controls; and understand the functions of an audit committee.

Suggestions for further study

Future researchers should introduce different variables other than one used and test for moderation or mediating effect of such variables on the relationship between board composition and working capital management in agricultural firms listed in NSE. The study also recommends inclusion of other board composition variables in future studies like multiples directorships, board independence among others to find their effect.

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